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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,460	02/11/2002	Hiroto Oka	B422-181	4404

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EXAMINER	
NGUYEN, LUONG TRUNG	
ART UNIT	**PAPER NUMBER**
2612	

DATE MAILED: 02/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/073,460	OKA ET AL.	
	Examiner	Art Unit	
	LUONG T NGUYEN	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 February 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested:

SYNCHRONIZING IMAGE PICKUP PROCESSES OF A PLURALITY OF IMAGE PICKUP APPARATUSES.

Claim Objections

3. Claims 3-4 are objected to because of the following informalities:

Claim 3 (line 4), "the image" should be changed to --an image--.

Claim 4 is objected as being dependent on claim 3.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-3, 6-7, 9-10, 12-13, 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lowy et al. (US 5,768,151) in view of DeAngelis et al. (US 5,552,824).

Regarding claim 1, Lowy et al. discloses an image pickup system including a plurality image pickup apparatuses (master camera 11 and slave camera 12, Figure 2) connected predetermined communication medium (CPU 26, frame grabber 25, Figure 2), wherein one of said plurality image pickup apparatuses (master camera 11) comprises synchronization information generating means for generating synchronization information for synchronizing said plurality of image pickup apparatuses (means for synchronizing SYNC SIGNAL, Figure 2, Column5, Lines 5-12), and each said plurality image pickup apparatuses (slave camera 12, Figure 2) comprises receiving means for receiving said synchronization information (Figure 2 shows that slave camera 12 includes means for receiving SYNC SIGNAL), frame synchronization signal generating means for generating basis of said frame synchronization signal on the synchronization information and image data generating means for generating image data on the basis of said frame synchronization signal (Figure 2 shows that based on SYNC SIGNAL, slave camera 12 generates frame image data transmitted to frame grabber 25).

Lowy et al. fails to specifically disclose transmitting means transmitting said synchronization information to said plurality image pickup apparatuses. However, DeAngelis et al. discloses a network with plurality of cameras of which one is a primary camera C1 and the rest are slave cameras Cj (Figures (9A-9B, Column 21, Lines 7-34). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the

device in Lowy et al. by the teaching of DeAngelis et al. in order to allow an user to monitor multiple scenes at the same time on a display.

Regarding claims 2, 7, 10, 13, 16, DeAngelis et al. discloses wherein said frame synchronization signal generating means generates said frame synchronization signal by using time information for managing a predetermined communication cycle and said synchronization information (each frame generated by a camera is marked with an "absolute" time marking, Column 21, Lines 1-34).

Regarding claim 3, Lowy et al. and DeAngelis et al. fail to specifically disclose a control device which selects an image pickup apparatus for generating said synchronization information. However, DeAngelis et al. discloses a plurality of line scan cameras of which is a primary camera C1 (Figure 9A, Column 21, Lines 7-34). It would have been obvious to include a control device into the system of Lowy et al. and DeAngelis et al. in order to select one camera as a primary camera for generating synchronization information.

As for claim 6, all the limitations are contained in claim 1. Therefore, see Examiner's comments regarding claim 1.

As for claim 9, all the limitations are contained in claim 1. Therefore, see Examiner's comments regarding claim 1.

Claim 12 is a method claim of apparatus claim 6. Therefore, claim 12 is rejected for the reason given in claim 6.

Claim 15 is a method claim of apparatus claim 9. Therefore, claim 15 is rejected for the reason given in claim 9.

6. Claims 4-5, 8, 11, 14, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lowy et al. (US 5,768,151) in view of DeAngelis et al. (US 5,552,824) further in view of Iijima (US 6,286,071).

Regarding claim 4, Lowy et al. and DeAngelis et al. fail to specifically to disclose wherein said control device transmits control information including a communication address corresponding to image pickup apparatus for generating said synchronization information said plurality of image pickup apparatuses. However, Iijima teaches a communication system 100, in which an IEEE1394 high-speed serial bus may be used as a control bus which connects DV camera/recorder 50 to plurality of electronic devices (Figure 1, Column 6, Lines 22-49). It is noted that the IEEE1394 packet has a certain node ID (communication address) is transmitted within the network. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Lowy et al. and DeAngelis et al. by the teaching of Iijima in order to alleviate a burden imposed upon the user when the user operates a plurality of electronic devices connected by the communication control bus such as IEEE1394 serial bus (Column 5, Lines 23-30).

Regarding claims 5, 8, 11, 14, 17, Lowy et al. and DeAngelis et al. fail to specifically to disclose the predetermined communication medium conforms with the IEEE1394-1995 or its extended standard. However, Iijima teaches a communication system 100, in which an IEEE1394 high-speed serial bus may be used as a control bus which connects DV camera/recorder 50 to plurality of electronic devices (Figure 1, Column 6, Lines 22-49). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Lowy et al. and DeAngelis et al. by the teaching of Iijima in order to alleviate a burden imposed upon the user when the user operates a plurality of electronic devices connected by the communication control bus such as IEEE1394 serial bus (Column 5, Lines 23-30).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ely (US 5,982,418) discloses distributed video data storage in video surveillance system.

Cooper et al. (US 5,995,140) discloses system and method for synchronization of multiple cameras.

Kanade et al. (US 6,084,979) discloses method for creating virtual reality.

Sasaki et al. (US 6,791,602) discloses frame switcher and method of switching digital camera and monitoring system.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUONG T NGUYEN whose telephone number is (703) 308-9297 or (571) 272-7315. The examiner can normally be reached on 7:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on (703) 305-4929 or (571) 272-7308. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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2/20/05

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